DETAILED ACTION

1. Claims 1-45 are allowed over the prior arts of record.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with David R. Cochran on 1/26/2010. The examiner's amendment is necessitated to include the allowable subject matter and to further clarify the claimed invention.

4. Claims 7, 12, 17, 26, 36, and 41 have been amended below:

7. (Currently Amended) A method comprising:

compiling a source code module into an executable object module that includes an unresolved reference to a separately compiled object module;

loading the executable object module, wherein the loading includes replacing the unresolved reference with a reference to a system module without loading instructions of the system module, the system module separate from the executable object module, and wherein neither the compiling nor the loading include determining whether the unresolved reference refers to a defined external symbol; and

executing the executable object module, wherein the executing includes calling the system module for loading the separately compiled object module as needed at runtime such that the separately compiled object module is loaded without being loaded when loading the executable object module and executing the separately compiled object module.

12. (Currently Amended) A method comprising:

creating an executable object module that includes symbolic references to addresses in ones of a set of one or more separately compiled object modules, wherein the executable object module includes a page-aligned code segment and a page-aligned data segment, and wherein the object module includes resolved internal code-to-data offsets;

replacing, in the executable object module, the symbolic references with addresses to a loader subroutine without instructions of the loader subroutine in the executable object module; and

executing the executable object module, wherein executing includes executing the loader subroutine to load one of the separately compiled object modules as needed at runtime such that the one separately compiled object module is loaded without being loaded when loading the executable object module and executing the one of the separately compiled object modules.

17. (Currently Amended) An apparatus comprising:

a compiler unit to create an executable object module based on a source code module, wherein the executable object module includes an unresolved reference to a separately compiled object module;

a storage unit to store the executable object module;

an execution unit to receive the executable object module; and

a loader unit to find the executable object module in the storage unit and present the executable object module to the execution unit, wherein the loader unit is configured to replace the unresolved reference with a reference to a system module without loading instructions of the system module, the system module separate from the executable object module, the loader unit separate from the executable object module and configured to load the separately compiled object module as needed at runtime such that the separately compiled object module is loaded without being loaded when loading the executable object module, and wherein the loader unit is not to determine whether the unresolved reference refers to a defined external object module.

26. (Currently Amended) A system comprising:

a memory unit, the memory unit including, a compiler unit to create an executable object module based on a source code module, wherein the executable object module includes a symbolic reference to a separately compiled object module;

a loader unit to present the executable object module for execution, wherein the loader unit is configured to replace the symbolic reference with an address to a system module to link the executable object module and the separately compiled object module such that instructions of the loader unit are separate from the executable object module

and the separately compiled object module, the loader unit configured to load the separately compiled object module as needed at runtime such that the separately compiled object module is loaded without being loaded when loading the executable object module, and wherein the loader unit is not to determine whether the symbolic reference refers to a defined external object module; and

a processor to receive the executable object module from the loader unit of the memory unit.

36. (Currently Amended) A machine-readable storage medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

compiling a source code module into an executable object module that includes an unresolved reference to a separately compiled object module;

loading the executable object module, wherein the loading includes replacing the unresolved reference with a reference to a system module without loading instructions of the system module, and wherein neither the compiling nor the loading include determining whether the unresolved reference refers to a defined external symbol; and

executing the executable object module, wherein the executing includes calling the system module for loading the separately compiled object module as needed at runtime such that the separately compiled object module is loaded without being loaded when loading the executable object module and executing the separately compiled object module.

41. (Currently Amended) A machine-readable storage medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

creating an executable object module that includes unresolved references to a set of one or more separately compiled object modules, wherein the executable object module includes a page-aligned code segment and a page-aligned data segment, and wherein the object module includes resolved internal code-to-data offsets;

replacing, in the executable object module, the unresolved references with references to a loader subroutine without instructions of the loader subroutine in the executable object module; and

executing the executable object module, wherein executing includes, executing the loader subroutine to load one of the separately compiled object modules and as needed at runtime such that the one separately compiled object module is loaded without being loaded when loading the executable object module executing the one of the separately compiled object modules.

Examiner's Statement of Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance:

6. Szoke (U.S. Patent No. 4,787,034) and Mulchandani et al. (U.S. Patent No. 6,112,025) taken alone or in combination fail to teach or reasonably suggest "*wherein the loading includes replacing the unresolved references with an address of a third set of instructions without loading the third set of instructions into the execution unit when loading the first set of instructions and without loading the second set of instructions into*

the execution unit when loading the first set of instructions" in combination with other claimed subject matter as recited in the independent claims 1, 21, and 30.

7. Szoke (U.S. Patent No. 4,787,034) and Mulchandani et al. (U.S. Patent No. 6,112,025) taken alone or in combination fail to teach or reasonably suggest "*wherein the loading includes replacing the unresolved reference with a reference/address to a system module/loader without loading instructions of the system module, the system module separate from the executable object module, and loading the separately compiled object module as needed at runtime such that the separately compiled object module is loaded without being loaded when loading the executable object module*" in combination with other claimed subject matter as recited in the independent claims 7, 12,17, 26, 36, and 41.

8. Therefore, it would not have been obvious to one having an ordinary skill in the art the combine Szoke and Mulchandani or any other prior art(s) to obtain the claimed invention.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571)

270-1070. The examiner can normally be reached on Monday - Thursday 10:00 AM - 3:00 PM EST.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PN
1/27/2010
/Wei Y Zhen/
Supervisory Patent Examiner, Art Unit 2191